

Expanding timber species utilization in Guyana

An ITTO project helps to increase forest potential through LUS testing and marketing

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SINCE commercial logging began in 1624, Guyana has used just a few of the over 1000 tree species found in its tropical forests. In 2004, drafting of a project commenced to address the promotion and development of lesser used species (LUS) in Guyana. ITTO project PD344/05 REV.2 (1) focused on enhancing knowledge and use of LUS in the forest industry of Guyana. The Guyana Forestry Commission (GFC) began implementing the project in 2007 and has since worked towards: 1) analyzing physical and mechanical properties of a selected set of LUS; 2) increasing awareness and use of LUS; and 3) improving wood processing techniques for LUS used by local industry.

Expanding species utilization

When implementing the project, the GFC formed key linkages with the Forest Products Marketing Council (FPMC) of Guyana, a body set up in 2005 to boost Guyana's marketing of forest products in a more coordinated manner, focusing on providing market intelligence and product development functions for the forest sector. The Council's promotion of Guyana's wood products regionally and internationally fit well into the activities of the ITTO project.

The fifteen species targeted under the project were selected following a thorough review process examining key factors such as availability (based on forest inventory data), species distribution and accessibility of identified areas of occurrence, feedback from the local industry, physical and mechanical properties as well as possible end use applications. The following species were chosen for inclusion under the project: limonaballi (*Chrysophyllum pomiferum*); black kakaralli (*Eschweilera sagotiana/E. subglandulosa*); muniridan (*Qualea rosea*); burada (*Parinari campestris*); iteballi (*Vochysia surinamensis*); darina (*Hymenolobium flavum*); fukadi (*Buchenavia fanshawei*); tonka bean (*Dipteryx odorata*); wadara (*Couratari guianensis*); itikibororalli (*Swartzia benthamiana*); morabukea (*Mora gonggrijpii*); futui (*Jacaranda copaia*); suya (*Pouteria speciosa*); dalli (*Virola surinamensis*); and kurokai (*Protium decandrum*).

Trada Technology, a UK based consultancy firm, was contracted under the project to review and conduct tests on these species. Following the review, it was concluded that many of the species are strong potential substitutes for prime commercial species, especially for marine and



Next dock over is LUS: Greenheart piles from Guyana in Miami (USA).
Photo: Demerara Timbers Limited

construction purposes as well as other added-value end uses. The selected fifteen species will undergo abrasion testing applicable to use in both marine construction and decking, and will be benchmarked against other well established species in these end use applications, such as greenheart, ekki, oak and balau. Marine borer testing will also be conducted on selected species and benchmarked against greenheart and ekki, species traditionally used for marine applications. Natural durability tests will be used to assess suitability in end-use applications. In natural durability tests, reference to the European Union Standard EN 350-1 will be made for each species tested. This will, in part, aid marketing throughout the EU and other markets due to the international recognition of this standard.

Marketing work has also commenced with the design and production of sample boards to promote targeted LUS. In addition, promotional booklets are being prepared and published for dissemination to local stakeholders and target markets locally, regionally and internationally. Training in the utilization of LUS, including dissemination of information on results of the testing, was conducted in the fourth quarter of 2007 with forest concession holders, saw millers, lumber yard operators, exporters, education institutions and other stakeholders.

Challenges and lessons learned

Guyana's unique timber species mix and high species diversity often pose challenges for forestry enterprises. Grouping species by properties and end-use application, a key recommendation of the project, will assist greatly in consolidating larger volumes and more reliable supply. The FPMC is currently engaged in promoting Guyana's timber

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of participative management remains biodiversity conservation, priority is also given to the supply of environmental goods and services to local stakeholders in order to guarantee the sustainable conservation of the ecosystem involved.

Community forests

Innovative approaches to the management of community forests are being experimented with throughout the region, especially in Cameroon. These forests are designed to meet the needs of local stakeholders for social justice, economic benefits, healthy forests and responsible use. They have evolved with the trend towards decentralizing forest management in many countries, in order to ensure the respect of customary rights and to ensure a more equitable distribution of the benefits derived from forests. However, the practice of community forestry gives rise to many controversies. Objectives to safeguard biodiversity resources and improve the well-being of the communities concerned are often not attained. The sharing of rights and responsibilities is often far from equitable. Nevertheless, the importance of engaging with local communities to improve forest management justifies on-going efforts to build technical and socio-economic capacity for SFM within them.

Plantation forests

Plantations cover 1 678 000 and 612 000 hectares in West and Central Africa, respectively. Plantation establishment has been most rapid in Côte d'Ivoire, Ghana, Nigeria, Benin and Togo. Tropical plantations in the region are extremely diverse in terms of species, objectives and stakeholders (and, consequently, social, economic and ecological impacts). Large scale plantations are undertaken by State organisations or private companies. They are generally established on non-forest land or land that has long remained inactive. Plantations have been established with commercial species such as iroko, moabi, sipo, sapele, etc, or with fast growing species such as framiré, fraké, ayous, limba, teak, eucalyptus, pine, etc. In spite of the controversies they sometimes raise, the development of forest plantations generates potentially positive effects on sustainable development at the local, national and regional level. However, problems of land use allocation and the rights of local populations have raised questions about the management and sustainability of some plantations.

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species by end-use application, grouping species by common physical and mechanical properties.

Forest-based communities and small forest enterprises will particularly benefit from the outputs of this project, since the areas available to them will have greater relative value compared to current levels of utilization and market focus. Often, these entities do not have knowledge of extended species utilization, nor the resources for marketing and product development. The entire forest industry will benefit from expanding the current species utilization base, allowing increased production while maintaining sustainable forest management principles.

Future activities

The results of all LUS testing and the subsequent forest industry training program will be included in the final report of the project. In addition, promotional booklets on targeted LUS will be distributed at the local and regional levels.

African tropical forest governance

The increased focus on sustainable management has led many African governments to initiate several activities to improve overall forest governance in the region. Prominent among these are the African Forest Law Enforcement and Governance (AFLEG) process, participative management of protected areas and new tax reforms.

AFLEG

Realizing that corruption, illegal logging and illegal trade of forest products created enormous economic and social costs, the G-8 countries and the World Bank launched a Forest Action Plan to fight against these problems less than a decade ago. The related African Forest Law Enforcement and Governance (AFLEG) process was subsequently initiated within the framework of the New Partnership for Africa's Development (NEPAD). The first AFLEG ministerial conference was convened in October 2003. The AFLEG Declaration or Action Plan arising from the conference advocated actions relating to legislative and institutional reform, capacity-building, information, the enforcement of laws and follow-up actions, protection of faunal resources, management of forests and the financing of markets and trade. To this end, the majority of countries in the region have put in place new forest policies and initiated the development of rules applicable to either the whole forest sector or to particular fields which needed to be regulated. In addition, civil society, international organizations, NGOs and donors have become involved through new partnerships to assist programmes for the management of the forest sector and the implementation of forest codes.

Participative management

The largely government-led monopoly on management of national forests in Africa has led to decline of the sector and degradation of the resource. Democratic movements and the ongoing international dialogue on sustainable forests management prompted a search for solutions to the problems arising from traditional systems of forest management. Participative management or co-administration of protected areas has been defined as a form of partnership allowing the various actors involved in safeguarding nature to share the functions, rights and responsibilities of managing a territory or a range of resources enjoying statutory protection. This new alternative is at the heart of legislative reforms in Africa and has

The GFC has already commenced work on additional activities to boost development of the forest sector. The local industry in Guyana has shown significant interest in adding value locally and many mills have undertaken production of high quality timber products for niche markets. Demand has remained strong for Guyana's timber products for use in outdoor applications, including marine, construction and decking end-uses, along with indoor applications such as flooring and furniture. The GFC will continue to work with the forest sector in Guyana to ensure that a high level of quality is maintained in forest products to raise Guyana's image in international markets.

The project has been very successful in building a solid foundation for expanding the species utilization base of Guyana. This will certainly decrease the pressure on prime commercial species and continue to enhance the development of the forest sector in Guyana.

Project outputs are available from the ITTO Secretariat (fi@itto.or.jp).